

**R454B CHARGING INFORMATION – FOR COMPLETE CHARGING DETAILS, REFER TO THE OUTDOOR UNIT INSTALLATION AND SERVICE PROCEDURE**

**Maintenance checks using the Normal Operating Pressures table**

Table 2 may be used to help perform maintenance checks. This table is not a procedure for charging the system and any minor variations in the pressures may be expected due to differences in installations. However, significant deviations could mean that the system is not properly charged or that a problem exists with some component in the system.

**Charge Using the Subcooling Method**

**Cooling Mode** – When the outdoor ambient temperature is 60°F (15°C) and above, use the cooling mode to adjust the charge using the subcooling method. Target subcooling values in table 1 are based on 70 to 80°F (21-27°C) indoor return air temperature.

**Heating Mode** – When the outdoor ambient temperature is below 60°F (15°C), use the heating mode to adjust the charge using the subcooling charge levels (table ). Target subcooling values in table 1 are based on 65-75°F (18-24°C) indoor return air temperature.

**Matchups/Charge Levels and Line Set Lengths**

Table 2 lists all the Lennox recommended indoor unit matchups along with the charge levels for the various sizes of outdoor units. **Charge levels on the unit nameplate are based on installations with 15ft. (4.6m) line sets; on line sets with 3/8”(9.5mm) liquid line, add 3oz. additional refrigerant for every 5ft. longer than 15ft. If line length is less than 15ft., subtract this amount (see Installation Instructions for more details).**

**Charge Using the Weigh-in Method**

If the system is void of refrigerant, locate and repair any leaks and then weigh in the refrigerant charge into the unit. For charge adjustments, be sure to consider line set length differences and, referring to table 1, adjust for the matchup difference.

- 1 - Recover the refrigerant from the unit.
- 2 - Conduct leak check; evacuate as previously outlined.
- 3 - Weigh in the unit nameplate charge, adjusting for matchup and line set length differences. If weighing facilities are not available use the Subcooling method.

**Table 1 – Normal Operating Pressures (Liquid ±10 and Vapor ±5 psig)**

Temperature	Cooling Operation – Liquid Line Pressure / Vapor Line Pressure			
°F*	-024	-036	-048	-060
65	225/134	245/128	236/126	255/124
75	262/137	284/130	275/130	297/126
85	303/139	328/132	317/132	343/127
95	351/141	375/133	367/134	393/129
105	400/143	426/136	417/137	447/131
115	456/146	479/138	471/139	500/137
Temperature	Heating Operation – Liquid Line Pressure / Vapor Line Pressure			
20	343/58	262/36	265/41	294/47
30	355/71	397/70	388/57	313/61
40	364/88	314/83	315/78	332/71
50	382/107	329/99	340/93	364/93
60	399/127	346/115	361/111	382/112

\*Temperature of air entering the outdoor coil.

**Table 2 – Indoor Unit Matches and Subcooling Charge Levels and Additional Charge\*\***

Indoor Matchup	Target Subcool		Total Charge		Additional Charge	
	Heating (±5°F)	Cooling (±1°F)	lbs	oz	lbs	oz
EL19KPV-024						
CBK48MVT-018/024 CBK47UH-024	26	12	8	6	0	0
CBK48MVT-030 CBK47UH-030	26	11	9	4	0	14
CK40(C,U)T-36	27	15	9	6	1	0
EL19KPV-036						
CBK48MVT-036 CK47UH-036	16	14	8	2	0	3
CBK45UH-036	19	25	9	14	1	15
CK40(C,U)T-30/36	61	16	7	15	0	0
CK40(C,U)T-36	20	11	9	6	1	7
EL19KPV-048						
CBK48MVT-048 CBK47UH-048	15	11	9	8	0	11
CBK48MVT-060 CBK47UH-060	16	17	11	1	2	4
CBK45UH-048	16	9	8	13	0	0
CBK45UH-060	14	12	9	6	0	9
CK40(C,U)T-49	15	12	11	4	2	7
CK40(C,U)T-50/60	19	11	10	2	1	5
CK40(C,U)T-60C	12	12	11	10	2	13
EL19KPV-060						
CBK48MVT-060 CBK47UH-060	21	19	11	15	2	10
CBK45UH-060	20	14	9	14	0	9
CK40(C,U)T-48	25	12	9	12	0	7
CK40HT-60D	19	14	9	5	0	0
CK40DT-60D	50	13	10	8	1	3

The values in this table are most popular match-up pressures; indoor match-up, indoor air quantity, and indoor load will cause the pressures to vary.

\*\*Amount of charge required in addition to charge shown on unit nameplate.

